

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

A 1. (CURRENTLY AMENDED) A method for providing sequential initialization of redundancy data in a volume comprising the steps of:

(A) defining a boundary;

5 (B) determining a location of said data with respect to said boundary; and

(C) initializing a redundancy location of said volume ~~and writing said~~ as data and a redundancy of said data is written to said volume.

2. (ORIGINAL) The method according to claim 1, wherein step (C) further comprises writing said data to a first portion of said volume and writing a redundancy of said data to a second portion of said volume.

3. (ORIGINAL) The method according to claim 2, wherein said first portion comprises a primary data portion and said second portion comprises a redundancy data portion.

4. (ORIGINAL) The method according to claim 1, wherein step (B) further comprises the step of:

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if said location is before said boundary, writing said data.

5. (ORIGINAL) The method according to claim 4, wherein step (B) further comprises the step of:

if said location is after said boundary, (i) enforcing a sequential write or (ii) not enforcing a sequential write.

6. (ORIGINAL) The method according to claim 5, wherein step (B) further comprises the step of:

if said location is at said boundary, moving said boundary and initializing said redundant location.

7. (ORIGINAL) The method according to claim 1, wherein boundary comprises an initialization boundary.

8. (ORIGINAL) The method according to claim 1, wherein step (C) is further configured to sequentially write redundant data to a redundancy portion of said volume.

9. (ORIGINAL) The method according to claim 1, wherein step (A) further comprises indicating an end of a primary data portion.

10. (ORIGINAL) The method according to claim 1, further
A/ comprising the step of:

(D) controlling steps (A), (B) and (C) in response to a
predetermined attribute.

11. (ORIGINAL) The method according to claim 10, wherein
said predetermined attribute is user defined.

12. (ORIGINAL) A controller software medium configured
to perform the steps of claim 1.

13. (ORIGINAL) A computer readable medium configured to
perform the steps of claim 1.

14. (CURRENTLY AMENDED) An apparatus comprising:
means for defining a boundary;
means for determining a location of said data with
respect to said boundary; and

5 means for initializing a redundancy location of said
volume ~~and writing said~~ as data and a redundancy of said data is
written to said volume.

15. (CURRENTLY AMENDED) An apparatus comprising:

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a ~~circuit comprising~~ a volume configured to provide initialization of redundancy data, wherein said circuit is configured to sequentially initialize a redundant location of said volume to store redundant data up to a boundary of said volume, wherein said initialization is performed as said redundant data is written to said volume.

16. (ORIGINAL) The apparatus according to claim 15, wherein said boundary is further configured to move and initialize a next redundant location.

17. (CURRENTLY AMENDED) The apparatus according to claim 15, wherein said ~~circuit~~ volume is controlled by a host device.

18. (CURRENTLY AMENDED) The apparatus according to claim 15, wherein ~~where~~ said ~~circuit~~ apparatus further comprises a drive controller.

19. (CURRENTLY AMENDED) The apparatus according to claim 15, wherein ~~where~~ said ~~circuit~~ apparatus is configured to control one or more drives.

A1 20. (CURRENTLY AMENDED) The circuit according to claim 19, wherein ~~where~~ said ~~circuit~~ apparatus is further configured to control one or more volumes of said one or more drives.

21. (NEW) The method according to claim 1, wherein said initialization is performed only as data is written outside of a primary data area of said volume.

22. (NEW) A method for providing sequential initialization of redundancy data in a volume, comprising the steps of:

(A) receiving a write commend;

5 (B) determining a location of data to be written in said volume;

(C) determining if said location is (i) inside, (ii) outside or (iii) at a boundary between an initialized portion and a non-initialized portion of said volume;

10 (D) if said location is inside said boundary, writing data without initializing;

(E) if said location is at said boundary, (i) moving said boundary and (ii) writing data while initializing said volume;

15 (F) if said location is outside said boundary, determining if a sequential write needs to be enforced;

A¹ (G) generating an error indication if a sequential write needs to be enforced; and

(H) if a sequential write does not need to be enforced, initializing said volume as data is written.

23. (NEW) The method according to claim 1, when said sequential initialization is implemented in a snapshot volume.